



Kentucky Geologists

Volume 6 Issue 2

November 2004

Newsletter of the Kentucky Board of Registration for Professional Geologists

Mission

The mission of the Board of Registration for Professional Geologists is to regulate the public practice of geology in the Commonwealth of Kentucky to protect the citizens of the Commonwealth from negligent, incompetent, or fraudulent practices.

Board

Larry R. Rhodes, *Chairman*
Douglas Reynolds
Michael P. Sanders
Robert E. Fox, *Public-at-Large*
James C. Cobb, *State Geologist, Ex-Officio*

Kentucky Division of Occupations & Professions

John C. Parrish, *Director*
Donna Solheim, *Board Administrator*

Office of the Attorney General

Mark Brengelman, *Board Attorney*

Contact Information

Registration Questions:

Donna Solheim, *Board Administrator*
Kentucky Division of
Occupations & Professions
P.O. Box 1360
Frankfort KY 40602
502-564-3296 ext. 240 tel
502-564-4818 fax
donna.solheim@ky.gov

Newsletter Comments:

Judith Hower, *Communications Specialist*
Kentucky Geological Survey
228 Mining & Mineral Resources
University of Kentucky
Lexington, KY 40506-0107
859-277-0777 tel
859-257-1147 fax
jhowe2@pop.uky.edu

<http://www.state.ky.us/agencies/finance/boards/geology/>

As an agency of the Commonwealth of Kentucky, the Kentucky Board of Registration for Professional Geologists is solely funded by applicants and credential holders, and receives no tax dollars.

Education for the Public Welfare

In recognition of the crucial role geology plays in public policy, one year ago the Geological Society of America (GSA) formed a Division of Geology and Society under the leadership of the National Committee on Geology and Public Policy. Dr. John Kiefer, Assistant State Geologist of the Kentucky Geological Survey (KGS), chairs both this new Division and the Southeastern Section of GSA, which also has a Committee on Geology and Public Policy. In these capacities, he has been instrumental in supporting the advancement of earth science education to ensure citizens are provided factual tools for decision-making in the interest of public welfare and safety.

Earth science has become viewed by some as a second-class science, and thus it has become optional or eliminated from some secondary science curricula. This neglect will lead to a decline in the number of adults with an adequate vocabulary and understanding to make knowledgeable decisions related to land use; resource development, consumption, and conservation; and the risks associated with geologic hazards.

Decline in earth science literacy is juxtaposed to the reality of our dependence on the earth for survival and the advancement of our civilization. Water and soil are essential to sustain human life. Human history has been measured by advancements that hinged on the discoveries and uses of mineral resources (e.g., Stone Age, Copper Age, Iron Age). Iron and coal together fueled the Industrial Revolution of the 19th Century. Conversely, depletion of Great Britain's most accessible and higher-grade coal reserves and minerals contributed to a gradual reversal in Britain's worldwide prominence. (1)

Likewise, the United States, once rich in the natural resources needed for industrialization, now stands in line with the rest of the world to purchase commodities such as iron and oil. In July 2004, China supplanted the United States as the No. 1 destination for foreign direct investment worldwide, i.e., money invested into factories, equipment, real estate, or existing companies. (2)



John Kiefer, PhD, Assistant State Geologist and Chair of GSA's Division of Geology and Public Policy and the Southeastern Section.

In Kentucky, earth resources, such as limestone, once viewed as greatly abundant, are now often unavailable due to land uses that restrict access to reserves. Nevertheless, about 10 tons of crushed stone are required annually

Continued on page 2

IN THIS ISSUE ...

Page	
1	Education for the Public Welfare
2	Board Actions
2	New Registrants
2	Calendar
3	Annual ASBOG Conference
3	Renewals
4	Retooling for Relevance
4	Letter from Our Board Chairman
4	Meet the Board: Douglas Reynolds
4	Geographic Information Advisory Council
5	Frequently Asked Questions
5	Review of Practical Geology Workshop
5	New Board Member
6	The September 27th Board Meeting

Board Actions

The Board took action at its September 27th meeting to approve a Cease and Desist Affidavit from E. Ray Garton and Mammoth Geophysical Inc. of Barrackville, West Virginia for practicing geology without a license by performing geophysical surveys and subsurface geologic mapping in Johnson and Lincoln Counties without such practice of geology being performed by a Kentucky-licensed geologist. The Cease and Desist Affidavit also prohibits their use of the word "geology" in Kentucky unless licensed by the Board.

New Registrants

New Kentucky registrants are listed below with home state and date of registration.

Mark James Krumenacker
(WI) 12/22/03

William L. Wilder
(TN) 02/02/04

Sarah M. Donaldson
(KY) 05/04/04

Kari A. Wallover
(KY) 05/04/04

Timothy Philip Stevenson
(OH) 05/04/04

Robert John Ristow, Jr.
(OH) 05/04/04

Jonathan L. McIntyre
(KY) 05/04/04

Alan H. Gillespie
(KY) 05/04/04

Michael J. Biliter
(KY) 05/04/04

Joseph Edwin Gillespie
(KY) 07/08/04

Raymond D. Milejczak
(KY) 07/09/04

Calendar

2004 Board Meetings

Next Meeting: November 29, 2004

Usual Meeting Dates: First Mondays of even-numbered months

Time: 1:00 p.m.

Location:

Division of Occupations and Professions
911 Leawood Drive,
Frankfort KY 40602

Note: Dates are subject to change.

**Please call the Board Office,
if you plan to attend.**

Continued from page 1

for each Kentucky resident. New subdivisions, alone, typically require an average of 340 tons of crushed stone per home.(3) These same types of issues apply to other resources.

In addition to resource availability, geologic hazards play a major role in our economy and growth. In western Kentucky, new internationally recommended standards for building codes and construction practices in earthquake-prone areas have raised the cost of residential and commercial construction. High earthquake hazard ratings for this region were a major factor that cost Kentucky its bid for a new uranium enrichment plant in Paducah.

The 17,000-member Geological Society of America (GSA) has issued a Position Statement entitled, "The Importance of Teaching Earth Science in the Public Schools." Included with the statement are the Science Content Standards of the National Science Education Standards, which recognize that the study of the earth sciences is essential at all grade levels, counter to common practices that restrict the earth science curriculum to grades K-8. The complete GSA Position Statement on education is available at <http://www.geosociety.org/aboutus/position4.htm>. Educational and teacher resources developed by the GSA are available on line at <http://www.geosociety.org/educate/>. (The GSA does not engage in lobbying activities, but simply issues Position Statements that reflect concerns of the membership.)

The KGS provides public decision makers with many tools, including the most sophisticated and complete digital mapping resources of any state in the nation, and geologic hazards data for areas prone to landslides, karst, and

Kentucky ASBOG Exams

March Exam

Application Deadline: January 18, 2005

Exam Date: March 4, 2005

October Exam

Application Deadline: August 23, 2005

Exam Date: October 7, 2005

Council on Examiners Workshop

November 3 – 4, 2004, Boise, Idaho

ASBOG 2004 Annual Meeting

November 1 – 7, 2004, Boise, Idaho

earthquakes. In addition, the KGS has an active Earth Science Education Committee and for more than eight years has provided resources to public school teachers and students for the study of geology. Educational resources of the KGS can be accessed at <http://www.uky.edu/KGS/education/education.html>. At this site, Kentucky Earth Science Core Content is available, along with a wide range of classroom resources. Questions about educational resources on the Web site can be directed to Stephen Greb, greb@uky.edu or 859-257-5500.

References

1. Youngquist W, *Geodesinies*. 1997, Portland: National Book Company.
2. Rothkopf DJ. China beats U.S. as hot spot for investment. *Lexington Herald-Leader*, 2004; Lexington, Kentucky. p. F1,F4.
3. Kentucky Crushed Stone Association Inc. *1994 Fact Sheet*. 1994: Frankfort, Kentucky.

Annual ASBOG Conference

Board member Bob Fox and Board Chairman Larry Rhodes will be attending the Annual ASBOG Conference in Boise, Idaho beginning November 2nd. Mr. Fox will be attending the testing portion of the meeting, and Mr. Rhodes will attend the business portion.

Renewals

Renewal notices were mailed on July 31, 2004. To date, 1,468 renewals have been received. Registrations can be renewed on line at the Board's Web site <http://www.ky.gov/agencies/finance/occupations/geologists/>.

Retooling for Relevance

Kenneth W. Kuehn, PhD
(KY PG #2341)

Michael T. May, PhD
(KY PG #2342)

Western Kentucky University

In October 2003, the authors sat for (and passed!) both portions of the ASBOG exam. In Kentucky, those of us engaged in teaching and research are exempt from the professional registration process, so the obvious question is, “Why did we do it?”

Since 1992, the academic portion of the ASBOG exam (Fundamentals of Geology) has been administered nearly 6,000 times with a consistently low pass rate of 60%. Since a bachelor’s degree is an exam prerequisite, the question becomes, “Are we teaching the right stuff?” The solution seemed straightforward: we should find out for ourselves!

The Fundamentals of Geology exam covers nine content domains. To reflect current professional practice of our science, the content and emphasis of each domain is based on a detailed ‘Task Analysis Survey’ completed every five years by thousands of practicing geologists. Some of the ASBOG exam content domains coincide with traditional ‘core’ content areas in typical undergraduate geology degree programs, but others, like ‘hydrogeology,’ do not. Hydrogeology comprises about 25% of the exam questions yet, at WKU our hydrogeology course has been optional. Other important exam content areas are more difficult to deal with academically. ‘Field Methods,’ for example, is contained in several of our



Mike May, PhD, and Ken Kuehn, PhD, Department of Geography and Geology, WKU

Photo by LaDonna Harmon courtesy of Western Kentucky University Office of University Relations

courses. Thus, we decided to define learning objectives for that content domain and distribute them across those courses to ensure they become part of every student’s learning experience.

Our ASBOG experience has guided us in aligning our geology curriculum with professional expectations, both in the kinds of courses we offer and in the emphasis each concept receives. After a two-year review of the Geology program, WKU is moving to meet more rigorous professional expectations while also creating more generally appealing and flexible options for future teachers of pre-college Earth Science and others who do not anticipate professional practice. Four program options have emerged: Earth and Space (Teacher), General Geoscience, Professional (major with minor), and Extended Professional (major only). The first two options are broad-based and will lead to a B.A.

degree in Geology. Our Professional and Extended Professional options are technical and will result in a B.S. degree in Geology. They require students to complete either a geology field camp or our 12-hour Geographic Information System certificate program. All four options spring from a common core and comprise enough hours to qualify graduates to sit for the ASBOG exam.

For several years we have required every exiting senior to participate in a standardized assessment process. Although this does not include the ASBOG exam, we may move in that direction as a means of evaluating our degree program and preparing our students for professional licensure.

This latter point brings us to one further benefit of our ASBOG exam experience. We can now honestly say to our students, “Yes, we really *do* practice what we preach!”

Letter From Our Board Chairman

Dear Dr. Kuehn and Dr. May:

On behalf of the Kentucky Board of Registration for Professional Geologists, I commend your initiative and vision in creating a geology curriculum of academic excellence at Western Kentucky University that ensures graduates are fully prepared to enter the world of professional geology. We thank you for providing the Commonwealth with an educational model that will equip future graduates for leadership roles in this important discipline.

Sincerely,
Larry Rhodes
Chairman
Kentucky Board of Registration for Professional Geologists

Meet the Board

Douglas Reynolds, PG

Douglas Reynolds, PG, was appointed to a 4-year term on the Board in September 2004. Doug is no stranger to the Board of Registration, having spearheaded its first newsletter and served as its first Communications Specialist. We are pleased and honored at Doug's willingness to serve; his knowledge and historical perspective on Board issues will be a great asset in future decision making.

Doug grew up with geology. His father earned a graduate degree in Geology at Indiana University before the family moved to Owensboro, Kentucky, when Doug was just a year old. Although born a Hoosier, Doug is rooted in Kentucky with his family ancestry stemming from the mountains of Eastern Kentucky. Doug was raised in Owensboro; he then followed his family's tradition by earning a BS in Geology at Murray State University. He returned to Owensboro where he began learning the business of Petroleum

Geology. During this time he continued his education at Indiana University, and earned his MS in Geology in 1987. From 1999 to 2002, Doug moved to Lexington and served as a Communications Specialist for the Board while employed by the Kentucky Geological Survey. Since then Doug has returned to Owensboro to continue a career as a consulting Petroleum Geologist with Reynolds Resources Inc. where he brings the geological perspective to oil exploration and production.

Doug currently serves of President of the Indiana-Kentucky Geological Society and is a member of the Kentucky Society of Professional Geologists and the American Institute for Professional Geologists. He is President of the Independent Oil Producers Association (IOPA), Tri-State. IOPA works with federal legislators and units of the executive branch to seek support for issues affecting the interests of small, independent oil producers.



Douglas Reynolds, PG

Doug and his wife Beth met while she was tending the desk at the Geology Library at Indiana University. He claims this demonstrates his diligence to his studies. Doug and Beth have two sons: Austin (12) and Robert (9). Welcome back, Doug!

Geographic Information Advisory Council - Update

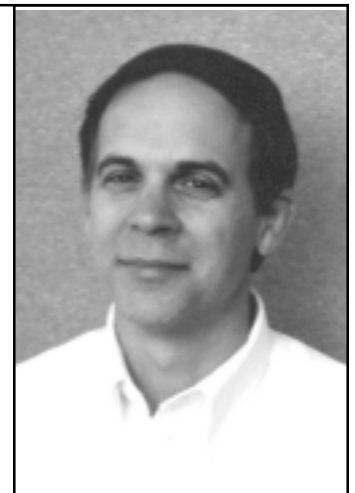
Jerry Weisenfluh, GIAC Correspondent

For the past few years, I have represented Kentucky Professional Geologists on the Governor's Geographic Information Advisory Council (GIAC). The Council meets quarterly to discuss issues related to developing, obtaining, and disseminating spatial (GIS) data within Kentucky, and focuses on easing the sharing of geographic information among State agencies and their constituents by developing standards for data creation. GIS education is another priority of the Council.

One of the first initiatives of the GIAC was to establish six basemap themes critical to map the Commonwealth. Working together with State and Federal agencies, GIAC helped coordinate the acquisition of these essential data that are now widely available to users from a variety of Internet sources. The image and locational data that are

used as a base map on many of the Internet mapping services now available in Kentucky—referred to as the Commonwealth Map—are a product of these efforts. Standards are being developed for six more geographic themes. The Commonwealth Map is Kentucky's proposal to support the USGS National Map program, which is intended to replace the existing system of printing and revising topographic maps.

Another important initiative of the GIAC was the creation of a new single zone state plane coordinate system, which was developed to eliminate the complications of distributing and using geographic information that spanned existing UTM or state plane grid zones. The single zone was officially adopted by the state legislature in 2001, as the official coordinate grid for Kentucky. Much of the spatial data being distributed by the state is now in single zone coordinates.



Jerry Weisenfluh, PhD
GIAC Correspondent

Ongoing committee work includes National Hydrologic Data Set revisions, the Height Modernization program, street centerline addressing, boundaries information, and digital submissions standards. More information about these projects can be found on the GIAC Web site <http://www.giac.ky.gov>. If you have any questions or issues related to Kentucky geographic information, please contact me at jerryw@uky.edu.

Frequently Asked Questions

The Board often receives correspondence from registered geologists asking for clarifications on points of the law and other matters. As questions arise, we would like to share these questions with you, and our responses which interpret KRS Chapter 322A.

Question: Can geologists become registered in Kentucky via comity?

Answer: Yes, under certain conditions. The rule for comity in Kentucky is stated in the Kentucky Revised Statutes 322A.040 Requirements for Registration, Paragraph (5). Registration may be provided to one who is registered or certified as a geologist in another state, if that state has standards at least equal to those provided in the Kentucky requirements for registration. In making a decision about comity, the comparison is "state law to state law" and has no bearing on the specific qualifications of the applicant as an individual licensed in another state. As long as the state in which the applicant holds a license has standards at least equal to or higher than Kentucky's standards, then the applicant is eligible for a Kentucky license.



Review of Practical Geology Workshop

If there is sufficient interest, a Review of Practical Geology Workshop will be offered in February 2005. Please contact William "Drew" Andrews to register your interest as soon as possible, so a decision can be made about whether to offer the workshop. Drew can be contacted at the Kentucky Geological Survey at wandrews@uky.edu, 859-257-5500 ext 138, or by fax 859-257-1147.

The workshop is sponsored by the Kentucky Society of Professional Geologists and provides (1) a brief technical review of selected topics that are frequently emphasized on professional geology examinations, and (2) an opportunity for self-assessment. The intended audience includes both professionals and students in the field of geology.

Disclaimer

The National Association of State Boards of Geology (ASBOG) does not endorse any examination preparation course, study guide, Web site, or other publication. This workshop has been developed by the KSPG and KY-AIPG solely to provide unofficial information of interest to geologists planning to take geology-related examinations, and is not endorsed or sanctioned by ASBOG or the Kentucky Board of Registration for Professional Geologists. ASBOG has no responsibility for the workshop, its contents, or improving the test scores of those who take the workshop. KSPG and KY-AIPG neither offer nor imply any guarantee or warranty that workshop participation will improve exam results. The Candidate Handbook available from ASBOG is designed to help candidates prepare for the ASBOG national examinations. ASBOG strictly prohibits the release of specific information about the Professional Geologist examinations.



New Board Member - Doug Reynolds

At the September 27th meeting of the Board, Doug Reynolds, PG., was welcomed as a new Board member by Chairman Larry Rhodes and the new Director of the Division of Occupations and Professions, John Parrish. Doug replaces Marsha Taylor Meyer whose term expired in July.



The September 27, 2004, meeting of the Board. Left to right: John Parrish, Director of the Division of Occupations and Professions; Larry Rhodes, Board Chairman; Donna Solheim, Board Administrator; James Cobb, PhD, State Geologist and Ex-Officio; and Doug Reynolds, board member.

Kentucky Geologists is published semiannually by the Kentucky Board of Registration for Professional Geologists. The publication features topics relevant to the ethical practice of geology in the Commonwealth. Suggestions for the newsletter should be directed to Judith Hower, Communications Specialist, Kentucky Geological Survey, 228 Mining & Mineral Resources Building, University of Kentucky, Lexington KY 40506-0107, (859) 277-0777; FAX (859) 257-1147 <jhowe2@pop.uky.edu>.



**Kentucky Board of Registration for
Professional Geologists**
228 Mining & Mineral Resources Building
University of Kentucky
Lexington KY 40506-0107

Nonprofit Organization
U.S. Postage Paid
Lexington KY
Permit 51

Return Service Requested